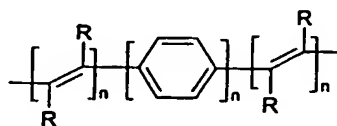
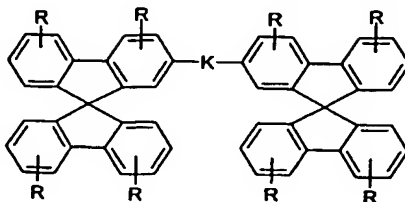


**CLAIMS**

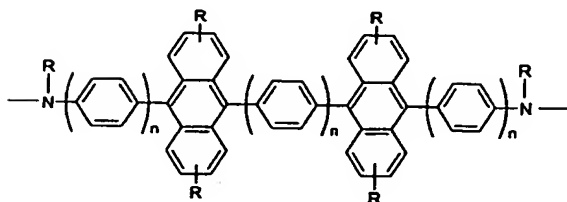
1. A luminescent spiro-dimer of the following chemical formula,



wherein, the linking group K is

in which n can be

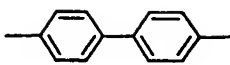

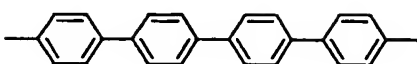
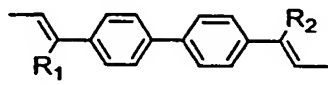
the same or different, and is an integer of 0 to 6, or



in which n can be the same or different,

and is an integer of 0 to 4; R can be the same or different, and is H, halogen, CN, CO<sub>2</sub>R\*, OR\*, NR\*<sub>2</sub>, SR\*, substituted or non-substituted alkyl group containing from 1 to 4 carbon atoms, substituted or non-substituted aryl or heteroaryl group containing from 4 to 24 carbon atoms, substituted or non-substituted heterocyclic group containing from 4 to 24 carbon atoms, or substituted or non-substituted fused ring group containing from 4 to 24 carbon atoms; and R\* can be the same or different, and is H, halogen, substituted or non-substituted alkyl or alkenyl containing from 1 to 6 carbon atoms, substituted or non-substituted aryl or heteroaryl group containing from 4 to 24 carbon atoms, or substituted or non-substituted heterocyclic group containing from 4 to 24 carbon atoms.

2. The luminescent spiro-dimer according to claim 1, wherein the linking

group K is a chemical bond, , , , or ; and R<sub>1</sub> and R<sub>2</sub> can be the same or different, and are H, halogen, CN, or alkyl, aryl, alkoxy or heteroaryl group containing from 1 to 10 carbon atoms.

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3. An organic light-emitting device comprising:
  - a first electrode having a high work function;
  - a second electrode having a low work function; and
  - at least one organic layer formed between the first electrode and the
 second electrode, which includes the luminescent spiro-dimer of claim 1.

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4. The organic light-emitting device according to claim 3, wherein the luminescent spiro-dimer of claim 1 is used as a host material or a dopant of an organic light-emitting layer.

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5. The organic light-emitting device according to claim 3, wherein the luminescent spiro-dimer of claim 2 is used as a host material or a dopant of an organic light-emitting layer.

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6. The organic light-emitting device according to claim 3, wherein the luminescent spiro-dimer of claim 1 is used to form a hole injecting layer.

7. The organic light-emitting device according to claim 3, wherein the

luminescent spiro-dimer of claim 2 is used to form a hole injecting layer.

8. The organic light-emitting device according to claim 3, wherein the luminescent spiro-dimer of claim 1 is used to form a hole transporting layer.

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9. The organic light-emitting device according to claim 3, wherein the luminescent spiro-dimer of claim 2 is used to form a hole transporting layer.

10. The organic light-emitting device according to claim 3, wherein the luminescent spiro-dimer of claim 1 is used to form an electron injecting layer.

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11. The organic light-emitting device according to claim 3, wherein the luminescent spiro-dimer of claim 2 is used to form an electron injecting layer.

12. The organic light-emitting device according to claim 3, wherein the luminescent spiro-dimer of claim 1 is used to form an electron transporting layer.

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13. The organic light-emitting device according to claim 3, wherein the luminescent spiro-dimer of claim 2 is used to form an electron transporting layer.

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